

**Notice of Allowability**

Application No.

10/017,929

Examiner

Jean A. Gelin

Applicant(s)

LINEBARGER ET AL.

Art Unit

2681

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/06/05.
2. ☒ The allowed claim(s) is/are 23, 2-22, 24-46, 52, 48-51, 53, 54, 71, 56-70, 72-77, 79-93, 99, 95-98, 100, and 101, renumbered as 1-97.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This is in response to the Applicant's amendments, arguments and Terminal Disclaimer filed October 06, 2005 in which claims 46, 53, 80, 82, and 98 have been amended, and claims 1, 47, 55, and 94 have been canceled. Claims 2-46, 48-54, and 95-101 are currently pending.

#### ***Allowable Subject Matter***

2. After a further search and thorough examination of the present application and in view of the applicant's arguments, amendments, and Terminal Disclaimer, claims 23, 2-22, 24-46, 52, 48-51, 53, 54, 71, 56-70, 72-77, 79-93, 99, 95-98, 100, and 101, renumbered as 1-97, are found to be in condition of allowance.

3. The following is an examiner's statement of reasons for allowance: the cited prior arts teach the overlay transmissions and the underlay transmissions are combined at a summit unit to produce a composite signal. On the other, the Applicant teaches a method and system that overlay multiple wireless protocols using dynamic channel sharing to increase capacity and throughput and to improve service delivery in a single communication.

As per claims 2-26 more specifically, the Applicant teaches, inter alia, a MAC entity configured to generate at least one control signal to at least one member of a group consisting of the incumbent system identifying at least one transmission level for the first signal and the overlay system identifying at least one other transmission level for the second signal. This limitation, in conjunction with all limitations of the

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independent claims, has not been disclosed, taught, or made obvious over the prior art of record.

As per claims 26-46 and 78--93, the Applicant teaches, inter alia, a MAC entity configured to determine the first transmission level for the incumbent signal and the second transmission level for the overlay signal, the first transmission level being complementary to the second transmission level. This limitation, in conjunction with all limitations of the independent claims, has not been disclosed, taught, or made obvious over the prior art of record.

As per claims 48-54, 56-77, and 95-101, the Applicant teaches, inter alia, a MAC entity configured to estimate at least one transmission level of the wireless complementary signal and to identify the at least one transmission level to the incumbent system and the overlay system. This limitation, in conjunction with all limitations of the independent claims, has not been disclosed, taught, or made obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

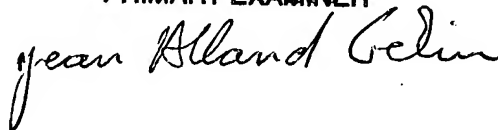
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGelin  
November 12, 2005

**JEAN GELIN**  
**PRIMARY EXAMINER**

A handwritten signature in cursive script that reads "jean Allard Gelin". The signature is written in black ink and is positioned below the printed name and title.